



Forestry Education Digest

Division of Forestry Education Program

Progress Report - October, 2003

"Education's purpose is to replace an empty mind with an open one." --Malcolm Forbes

Fall Foliage 101—Just The Basics

It's that time of year again! The phone starts ringing and traffic picks up considerably on weekends with folks out enjoying the last warm days of the season, looking for the best fall color. Here are some fall foliage facts to help satisfy those inquiring minds:

HOW leaves change colors

During the spring and summer, leaves produce the pigment **chlorophyll** that gives them their green color. Other pigments, **carotenoids**, are also present in the leaf, but are masked by the more abundant chlorophyll.

When autumn approaches and days grow shorter, trees produce less chlorophyll, thus allowing the carotenoids to become visible (yellow, brown or orange leaves). Also in the autumn, another group of pigments, **anthocyanins**, develop in some trees, appearing as reds and purples.

WHEN will leaves change colors and when is peak color predicted

Difficult questions to answer! There are multiple interrelated factors involved, including individual tree genetics, site, annual rainfall, recent local temperature and rainfall, future rainfall and wind, length of daylight hours, amount of sunlight, and severity of frost. Here are some "rules of thumb":

- Peak fall colors in Indiana:
 - ◆ Northern counties: first week of October
 - ◆ Central counties: second to third week of October
 - ◆ Southern counties: fourth week to end of October

"Just The Numbers"

PLT: For 2003:
19 workshops, 388 participants;
overall total since 1985: 18,696

- Best fall color formation will occur when there are bright, warm days and cool nights (but not freezing). Freezing temperatures cause a "callousing" at the point of connection between the leaf stem and twig, which makes the leaf more susceptible to falling off when there is a driving rain or strong wind. So a hard frost, coupled with heavy rain and/or windy conditions, are not conducive to good fall color.

WHERE to go to see the best fall colors

This is a good opportunity to promote state properties, particularly those lesser known. Brown and Parke counties get very heavy visitation, but many other areas are equally beautiful. Most anywhere there are hills and trees, there will be good fall colors.

LEAFLINE phone number: 317-232-4002

A fall color report will be updated once or twice each week (depending on conditions) through October. This is NOT a toll-free number.



Want more details? Call Sam Carman (317-232-4119) or Donna Rogler (317-549-0354)
Also be sure to check out the NR Education Center's website: www.in.gov/dnr/nrec